

Supplementary materials

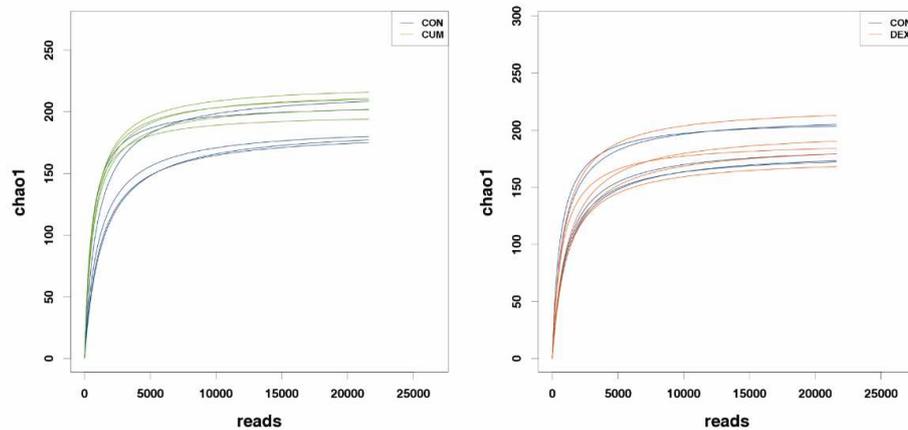


Figure S1: Dilution curve of Alpha index of sample species richness. The horizontal axis represents the number of clean reads randomly extracted from a sample, and the vertical axis represents the species diversity of single sample. One curve in the figure represents one sample. The curve tends to be flat means the sequencing data is more reasonable. Otherwise, the sequencing depth is not enough when curve rising.

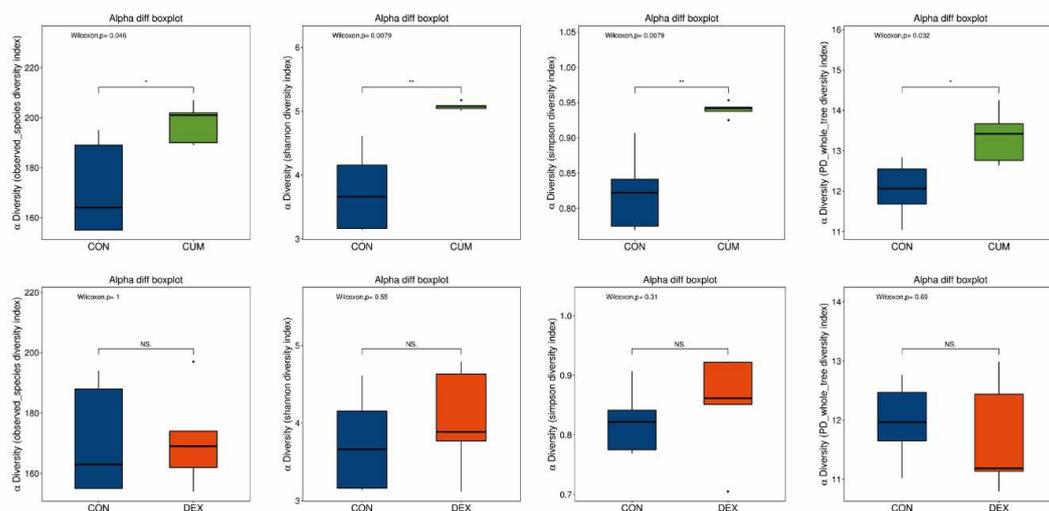


Figure S2: Alterations of gut microbiota in depression models. Observed species, Shannon, simpson, α -diversity index observed species and PD_whole tree diversity reveals the intestinal flora differences in evenness and richness. CUMS showed the significantly higher species richness and evenness compared with CON group, DEX presented no significance in species. All figures $*P<0.05$; $**P<0.01$, n.s., no significance.

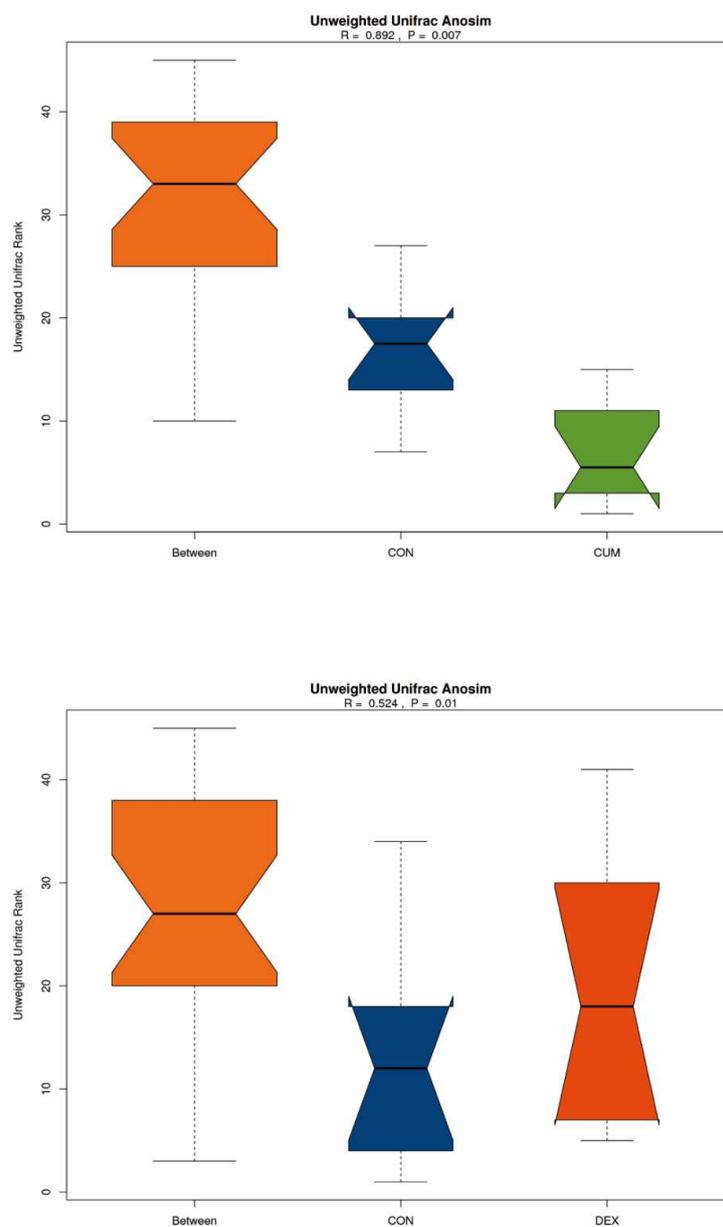


Figure S3: Anosim analysis of gut microbiota based on unweighted unifrac distance. The abscissa represents all samples (Between) and each group, and the ordinate represents the rank of unifrac distance. When the rank of Between group is higher than that of other groups, it indicates that the difference between groups is greater than that within groups. R was between (-1,1): if $R > 0$, indicating that the difference between groups was greater than that within groups, when $R < 0$ indicates that the intra-group difference is greater than inter group. The reliability of statistical analysis is expressed by P , and $P < 0.05$ indicates that the statistics are significant.

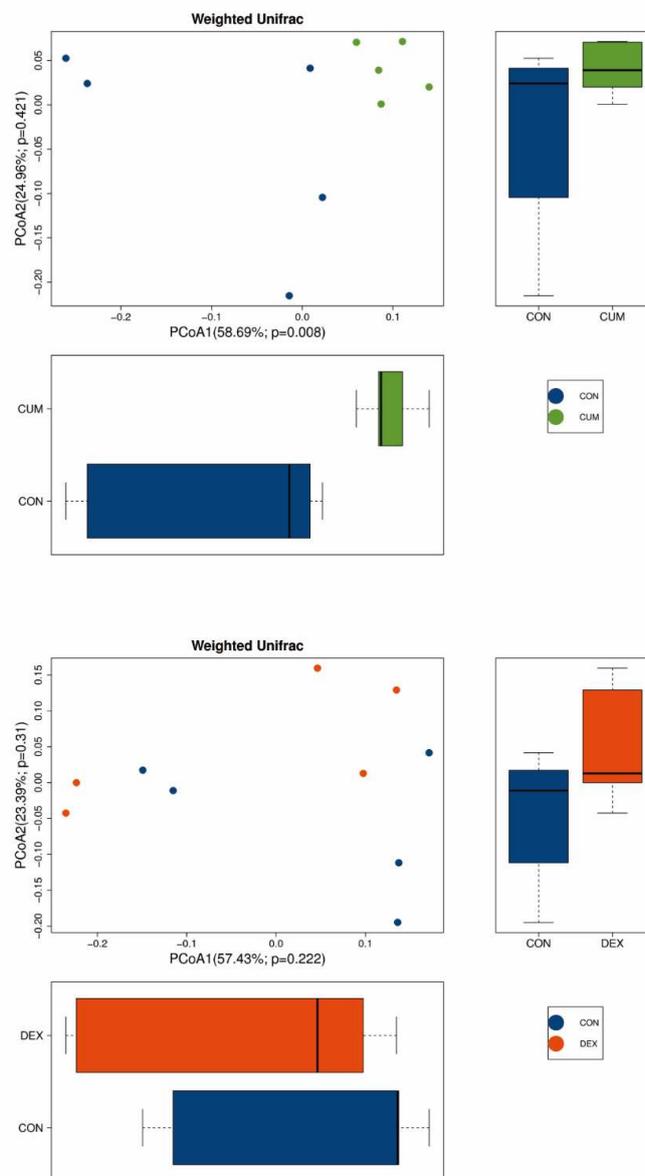


Figure S4. Principal coordinate analysis (PCoA) analysis of gut microbiota based on weighted unifrac distance. It reveals the differences in the microbial composition among samples. The horizontal and vertical coordinates represent the first and second principal coordinates respectively, and the percentage represents the contribution rate of the corresponding principal coordinates to the sample difference. The p value is the test p value of the corresponding principal coordinates. Points represent each sample and different colors represent different groups.

